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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,568	05/01/2001	Michael Christopher Martin	RSW920010076US1	4861
26502	7590	11/17/2004	EXAMINER	
IBM CORPORATION IPLAW IQ0A/40-3 1701 NORTH STREET ENDICOTT, NY 13760			CHANG, JUNGWON	
			ART UNIT	PAPER NUMBER
			2154	

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/846,568

Applicant(s)

MARTIN ET AL.

Examiner

Jungwon Chang

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/1/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-11 are presented for examination.
2. Claim 1 is objected to because the following informalities:
Line 5, "the server" should be "the web server".
Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - a. The following term in the claim is insufficient antecedent basis.
 - i. the demand – claim 1, line 1;
 - ii. the last N web pages – claim 2, line 2;

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2154

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 4-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Myerson (US 5,892,917).

7. As to claim 1, Myerson discloses the invention as claimed, including a method for adapting to change in the demand on a web server (104, fig. 1) (col. 1, lines 8-17 and 49-53; col. 2, lines 49-57), comprising the acts of:

associating session tracking objects (150-156, fig. 2; 170-182, fig. 3) with browsers (i.e., browser, 116, fig. 1; col. 4, lines 10-14) that access a web server (104, fig. 1) (col. 3, lines 13-20; col. 4, lines 35-46; col. 4, line 62 – col. 5, line 22; col. 5, lines 46-49 and 64-67), wherein the session tracking objects include identifications of web pages requested by the browsers (i.e., HTTP command, 175, fig. 3; Object ID, 176, fig. 3; col. 5, lines 46-49; URL, col. 5, line 64 – col. 6, line 9); and

analyzing the identifications of web pages requested by the browsers to determine caching priorities (i.e., weight data representing the relative frequency of requests for the various objects associated with the Web site; col. 3, lines 25-27; col. 4, lines 62-67; col. 6, lines 54-61; high object caching rate; col. 8, lines 57-65; high rates of object caching; col. 9, lines 5-7) for the server (fig. 6; weight data representing the relative frequency of requests for the various objects associated with the Web site; col. 4, line 62 – col. 5, line 22; col. 8, lines 54-65; col. 9, lines 5-29).

Art Unit: 2154

8. As to claim 4, Myerson discloses the session tracking objects are HTTP session objects (col. 5, lines 46-49; col. 7, lines 1-3).

9. As to claim 5, Myerson discloses the caching priorities are proportional to relative frequencies of browser requests for web pages (i.e., weight data representing the relative frequency of requests for the various objects associated with the Web site; col. 3, lines 25-27; col. 4, lines 62-67; col. 6, lines 54-61; high object caching rate; col. 8, lines 57-65).

10. As to claim 6, Myerson discloses the caching priorities are proportional to recency of browser requests for web pages (col. 5, lines 15-22).

11. As to claims 7 and 8, Myerson discloses the act of analyzing is performed periodically (col. 4, lines 35-46) and in response to a triggering event (i.e., web page request (object request) frequency data is updated; col. 8, lines 44-46 and 54-65).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myerson (US 5,892,917), in view of Ronald et al. (US 2003/0041143), hereinafter referred to as Ronald.

14. As to claims 2 and 3, Myerson discloses identifications of web pages requested by the browsers (i.e., HTTP command, 175, fig. 3; Object ID, 176, fig. 3; col. 5, lines 46-49; URL, col. 5, line 64 – col. 6, line 9). However, Myerson does not specifically disclose the identifications of the last N pages requested by each of the browsers and N is five. Ronald discloses the identifications of the last N pages requested by each of the browsers (fig. 5; page 5, [0069], [0070]) and N is five (i.e., if user starting from page E – D – G – M – N, then N is five; or if user starting from page F – D – G – M – N, then N is five; fig. 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Myerson and Ronald because Ronald's identification of the requested last pages would allow the web server to determine the popularity of each web page by analyzing the number of times users have visited the web pages.

15. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myerson (US 5,892,917), in view of Glance et al. (US 6,415,368), hereinafter referred to as Glance.

16. As to claim 9, Myerson discloses the invention substantially as claimed, including a method for adapting to change in the demand on a web server (104, fig. 1) (col. 1,

lines 8-17 and 49-53; col. 2, lines 49-57) comprising the acts of:

associating session tracking objects (i.e., session ID; col. 3, lines 13-20) with browsers (i.e., browser, 116, fig. 1; col. 4, lines 10-14) that access a web server (104, fig. 1) (, wherein the session tracking objects include identifications of web pages (i.e., URL) requested by the browsers ; and

analyzing the identifications of web pages requested by the browsers to determine caching priorities (i.e., weight data representing the relative frequency of requests for the various objects associated with the Web site; col. 3, lines 25-27; col. 4, lines 62-67; col. 6, lines 54-61; high object caching rate; col. 8, lines 57-65; high rates of object caching; col. 9, lines 5-7) for the server (fig. 6; weight data representing the relative frequency of requests for the various objects associated with the Web site; col. 4, line 62 – col. 5, line 22; col. 8, lines 54-65; col. 9, lines 5-29).

17. Myerson does not specifically disclose altering a server cache responsive to the caching priorities. However, Glance discloses altering a server cache responsive to the caching priorities (i.e., caching replacement algorithm; col. 1, lines 31-45; calculate priority weight of URL, update cache index, 68, fig. 2; update cache index with URL, weight, timestamp, 86, fig. 3; col. 8, lines 21-23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Myerson and Glance because Glance's altering the server cache would improve quality of service of Myerson's system by allowing the server cache to update cache priorities based on ranking the web pages according to the frequency of requests and the

recency of requests.

18. As to claims 10 and 11, they are rejected for the same reasons set forth in claim 9 above. In addition, Glance discloses the altering further includes the act of re-loading (i.e., refreshing or updating) at least part of the server cache (col. 1, lines 31-45 and 60-67; 68, fig. 2; 86, fig. 3; col. 8, lines 21-23), and the act of altering a cache algorithm associated with the server cache (i.e., caching replacement algorithm; col. 1, lines 31-45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Myerson and Glance because Glance's re-loading and altering the cache would allow the server cache to update cache priorities based on ranking the web pages according to the frequency of requests and the recency of requests.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Linden et al, Pub. No. 2002/0198882, Cherkasova et al, patent 6,425,057, Fields et al, patent 6,757,724, Aggarwal et al, patent 6,012,126, Cherkasova et al, patent 6,546,473, Wexler et al, patent 6,499,088 disclose method and system for determining cache priority depending upon frequency of web pages access.

Art Unit: 2154

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is (703)305-9669. The examiner can normally be reached on 9:30-6:00 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWC, Jungwon

JWC
November 12, 2004